Boy with Severe Allergies Using Robot to Attend First Grade

When Devon Carrow was a baby, a cookie-coated kiss from his mom made him break out in hives. An accidental encounter with peanuts at his godparents' home three months later landed him in the hospital, under an oxygen tent. His food allergies are so severe that he doesn't even have to eat something in order to have a life-threatening reaction -- just breathing in trace amounts of an allergen is enough to send him into anaphylactic shock.

"He's almost like the boy in a bubble," his mother, Rene Carrow, told the Buffalo News. "I try to let him do some things. I want him to have the best life he could have."

Now seven years old, Devon's severe allergies mean that he can't leave the house for long. If he goes to the movies, his mom has to cover the seats with their own sheets and bring popcorn from home in order to avoid an allergic reaction. Perfumes and fabric softeners cause his throat to swell closed; friends have to take showers and change their clothes before visiting. Just sitting in the same classroom with a kid who ate peanut butter at lunch could kill him.

But thanks to technology, the home-bound boy is finally able to attend school in person -- so to speak. He sits in his classroom, runs small errands for his teacher, and participates in group projects all thanks to a $6,000 robot from Nashua, N.H.-based VGo Communications. "It's not called 'VGo' in the school -- it's 'Devon'," his mother said. "The only thing that's different is Devon is not in the classroom. He's required to do everything ever other kid does in the class."
Devon was homeschooled for Kindergarten, and now attends first grade at the Winchester Elementary School in West Seneca, New York. His mom converted a room in their home for use as a classroom, and two teachers help him manipulate his computer equipment from there. Thanks to the VGo, which he started using in January, Devon can walk the halls of Winchester Elementary with his classmates, check books out of the library, join other kids on the carpet for circle time, and participate on stage during assembly. The only things he can't do are attend gym and lunch, but once the school's wireless system is upgraded, he should be able to hang out in the cafeteria with his buddies while he eats his lunch at home.

Home-bound students can use this VGo robot to attend school remotely. "We try to give the child the ability to feel like they're right in class with everybody else," said Tom Ryder, co-founder of VGo Communications, in an interview. "There's no joystick or anything like that. It's a very simple driving interface. They just need a standard laptop or PC and off they can go."

The 48-inch-tall robot has wheels and is outfitted with two-way audio and video. The user can manipulate the robot's camera to "see" anything in the room, and a small screen on the front of the robot displays the user's image.

"You can be pretty much anywhere in the world, as long as you're connected to the internet," Ryder says.

Carrow is one of the youngest students to use VGo -- most of the others are in high school, Ryder says -- and his classmates take his robotic presence in stride. When the class drew him get-well pictures after an allergic reaction landed him in the ICU last spring, "they drew a picture of a boy," not a machine, Winchester Elementary School Principal Kathleen Brachmann said.

It proves that he makes more of an impression on his classmates than his robot does.

"He's very smart," 7-year-old Riley Boody told the Buffalo News. "Every time the teacher asks us something, Devon puts his light on and answers. And, he's funny."

Devon Carrow can work with his first grade classmates thanks to the VGo robot. (Photo: Derek Gee/Buffalo News)
Comprehension questions – answers may be in phrases

1. What is the most common grade level of VGo users?

2. List two classes that Devon currently does NOT attend.

3. What is the price tag for a VGo?

4. Name the life-threatening reaction Devon experiences when exposed to peanut products.

5. Name the state in which the VGo Company is based.

6. What action by Devon’s classmates demonstrates that the kids think of Devon as a child not a robot?

2. In your opinion, what is the author’s opinion of the VGo? Use evidence in the text to back up your opinion.
3. Using the information provided in the article, explain what technological components VGo requires and how the robot works.

4. What is Devon’s mom referring to when she states that Devon is “like a boy in a bubble”? (Hint: You may have to google “boy in a bubble”)